

## **REMARKS**

### **I. Status of the Claims**

This submission is in response to the Final Official Action dated March 8, 2007. Claims 25-33, 35-38, and 50-55 are currently pending in the application. Claims 25-33, 35, and 50-55 are rejected; and claims 37 and 38 are withdrawn from consideration.

Reconsideration of the above-identified application, in view of the following remarks, is respectfully requested. Each of the Examiner's rejections is discussed below.

### **II. Rejections under 35 U.S.C. § 102(b)**

The Examiner has maintained his rejection of claims 25-33, 35, and 50-55 as anticipated by Sano et al. (GB 2254340). The Examiner contends Sano shows an article of manufacture having a hollow fiber membrane with a metallic layer bound to a substrate of retaining plates (claims 1, 19) where the metal layer may be chemically bonded to the polymeric film (Example 11). The Action further states that, while the method may be distinct, the article is as claimed and thus would behave the same. The Action also points out that the PTO will not dip the Sano article in a liquid to test for release of biocidal amounts of elutables.

Applicants respectfully traverse this rejection. The present claims recite an article of manufacture having a polymer matrix immobilized on a surface of the article of manufacture. An antimicrobial metallic material is bound to the matrix. None of claim 17, 19, or the Sano specification teaches or suggests a polymer matrix immobilized on the surface of an article of manufacture. Since Sano does not teach or suggest every element of the claimed invention, Sano does not anticipate claims 25, 27-29, 35, and 50-55.

Further, claim 53 recites that the polymer matrix is immobilized on a surface of the article of manufacture by covalent bonding, ionic interaction, coulombic interaction, hydrogen bonding, or cross-linking. Claim 54 recites that the polymer matrix is functionalized to enable immobilization on the surface. Therefore, claims 53, 54, and dependent claim 55 are not anticipated by Sano. Sano does not teach immobilizing the polymer matrix directly on an article

of manufacture but instead solders a metal layer attached to the polymer matrix onto the article of manufacture.

As discussed by the inventor, Dr. Sam Sawan in the Declaration submitted herewith, the Sano complex will release biocidal amounts of elutables if placed in a liquid. Each claim of the present application requires that the antimicrobial coating does not release biocidal amounts of elutables into the surrounding ambient liquid. Since Sano does not teach or suggest every element of the claimed invention, Sano does not anticipate claims 25, 27-29, 35, and 50-55.

In addition, there is nothing in Sano to teach or suggest modifying the electrically conductive device in such a way to make it non-eluting. In order to make the surface non-eluting, the thick layer of silver would have to be removed or substantially modified. However, without such a layer, the silver cannot be attached (i.e., via soldering) to the article of manufacture and the membrane is not sufficiently electrically conductive. Since Sano provides that this is the purpose of his invention (see page 4 line 7-9), Sano teaches against forming the films of the present invention and such a modification would not have been obvious.

Accordingly, reconsideration and withdrawal of the present rejection under 35 U.S.C. § 102 is respectfully requested.

### **III. Double-Patenting**

Claims 25-32 and 50-55 have been rejected by the Examiner under the judicially created doctrine of obviousness-type double-patenting as being allegedly unpatentable over various claims in commonly-owned U.S. Patent 5,849,311.

In response, it is submitted that a terminal disclaimer will be timely filed upon allowance of any conflicting claims in the instant application.

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Therefore, in view of the above remarks, it is earnestly requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

If there are any other issues remaining that the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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